

**FARMERS, AUTONOMY AND
SUSTAINABLE RURAL LIVELIHOODS:
BIODIESEL PRODUCTION IN
BRAZIL AND TIMOR-LESTE**

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as part of the collaborative doctoral degree and/or fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This research was supported by an Australian Government Research Training Program Scholarship.

Signature of Student:

Date: 24 July 2017

Dedication

This thesis is dedicated to my Grandmothers (in memoriam):

Hilda Vera Gibbons (née Johnston)

Joan Gwendoline Kilham (née Tapfield)

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Abstract

Biodiesel schemes in the Global South have been espoused as able to address the complex intersection of alternative energy sources, rural development, sustainable agriculture and social welfare. Smallholder farmers are recognised as being central to the success or failures of these schemes yet the ways in which smallholder farmers negotiate their participation in biodiesel schemes as part of a wider livelihood strategy is currently under-theorised and based on limited empirical research. Understanding this process of negotiation and the reasons that smallholder farmers may choose to participate or not participate in biodiesel schemes is critical to developing a nuanced theory about the role of biodiesel schemes for rural development.

The purpose of this thesis was to consider smallholder farmers' participation in biodiesel schemes and the ways that biodiesel schemes have been incorporated into rural livelihoods. This study provides a way to bring smallholder farmers' experiences to the fore in the biodiesel debate.

To address this problem space, I interviewed smallholder farmers participating in government led biodiesel schemes in Brazil and Timor-Leste. These two biodiesel schemes were chosen due to similarities between the rural development and social inclusion goals of each scheme. I used a transdisciplinary research approach that was problem-centred, collaborative and methodologically flexible. Through the application of Grounded Theory Method to the farmer informants' narratives, I developed a novel conceptual framework titled the *Autonomous Livelihood Framework*.

The findings from this study indicate smallholder farmer narratives can re-interpret and challenge current biodiesel policy analysis. Farmers do not

simply respond and react to biodiesel schemes as external economic and agricultural policies: they actively manage their participation (or non-participation) in such schemes. The farmer informants' narratives about livelihoods and participation in biodiesel schemes — which are at times contradictory and difficult to justify under externally determined notions of success — make sense when interpreted through the notion of negotiating for autonomy. Autonomy is a useful theoretical concept and the Autonomous Livelihood Framework offers a unique way of interpreting livelihoods. A shift in perspective to consider smallholder farmer's as actors with agency that are negotiating their autonomy are more likely to result in solutions for the social questions of biodiesel schemes that are acceptable, adoptable and durable. This thesis is part of an emerging body of scholarship that is applying the concept of autonomy to rural livelihoods and moving forward not only via actor-centred approaches but with research grounded in farmer's own narratives.

Transcription and Translation

The farmer informants narratives used in thesis appear italicised and with double quotations marks to indicate informants spoken words as distinct from the author's commentary.

To enhance readability, specific punctuation, regional dialects and speech patterns have been removed. In addition, all audio spoken recordings were transcribed and then translated into Australian English. As such, the quotations here should be read as paraphrases rather than verbatim quotations from farmer informants.

Original audio-recording material will be available via a Data Archive (see Annex 4: Data Sharing and Archiving via Databank).

Transcription and translation work was as follows:

Brazil

Interviews in Brazil were conducted in Portuguese. Drielle Bezerra, Eliza Ferreira de Oliveira and Sarina Kilham provided transcription. Sarina Kilham undertook translation.

Timor-Leste

Interviews in Timor-Leste were conducted in Tetum. Olga Villanova and Sarina Kilham provided transcription. Sarina Kilham undertook translation.